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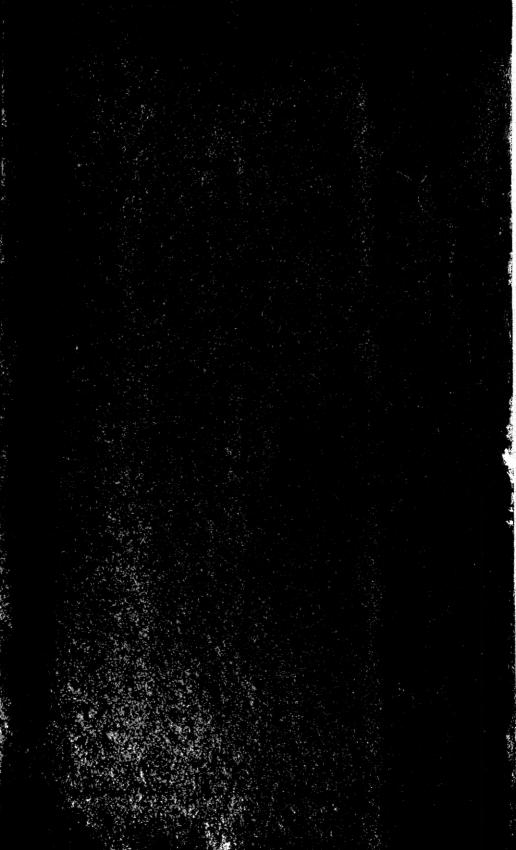
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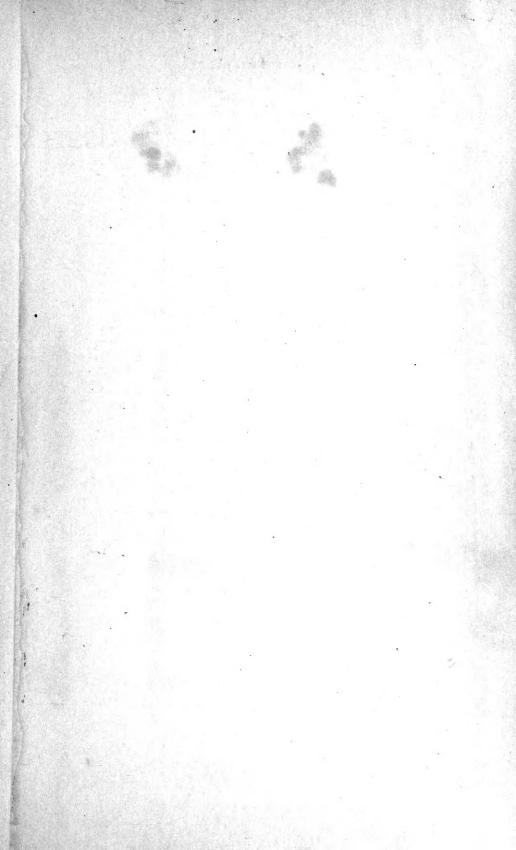
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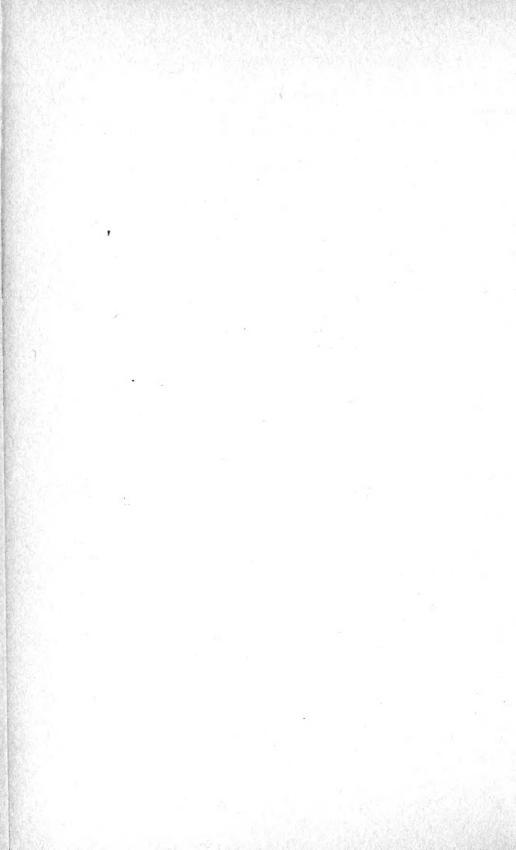
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# AMPHIBIANS AND REPTILES OF THE JAMES SIMPSON-ROOSEVELT ASIATIC EXPEDITION

BY

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# AMPHIBIANS AND REPTILES

OF THE

# JAMES SIMPSON-ROOSEVELT ASIATIC EXPEDITION

#### BY KARL P. SCHMIDT

The James Simpson-Roosevelt Asiatic Expedition of Field Museum of Natural History in 1925-1926, while not expecting to secure extensive collections of cold-blooded vertebrates, brought back seventy specimens of amphibians and reptiles, which include fifteen frogs and toads, forty lizards, and fifteen snakes. Twenty-two specimens came from the Allapalli Forest near Chanda, Central Provinces, India; twenty-one from Kashmir (including the province of Ladakh), and twenty-seven from Sinkiang (Chinese Turkestan).

A number of interesting systematic notes presented themselves in the course of the identification of this material and a small skink from the Allapalli Forest appears to be new. I have, accordingly, drawn up an annotated list of the collection.

Field Museum of Natural History is indebted to Dr. Thomas Barbour, of the Museum of Comparative Zoology, for the loan of specimens of *Gymnodactylus* for study in connection with this material.

#### **AMPHIBIANS**

## 1. Bufo melanostictus Schneider. Common Indian Toad.

Allapalli Forest, near Chanda, Central Provinces, India, Dec. 30, 1925, one specimen.

#### 2. Bufo viridis Laurenti. Green Toad.

The localities represented are: Nubra Valley, Kashmir, May 1925, two specimens; Sanju, Sinkiang, July 1925, three specimens; Kivas, Sanju River, July 4, 1925, one specimen; Bora, Bora River, July 7, 1925, one specimen; 'Plains of Sinkiang,' 1925, one specimen.

Stomach contents include numerous caterpillars, apparently of a single species; diptera; beetles; ants; and miscellaneous insect remains. Without extensive material for comparison, which is not at hand, the separation of this form from the European species does not seem war-

ranted, and though I believe it to be subspecifically distinct, I have followed the precedent of other authors in recording these toads as viridis.

- Microhyla rubra (Jerdon).
   Allapalli Forest, Jan. 1, 1926, one specimen.
- 4. Polypedates maculatus (Gray). Common Indian Tree-frog. Allapalli Forest, Dec. 30, 1925 and Jan. 1, 1926, two specimens.
- Rana cyanophlyctis Schneider.
   Allapalli Forest, Jan. 1, 1926, one specimen.
- Rana tigerina tigerina (Daudin). Indian Bull-frog.
   Allapalli Forest, Dec. 30, 1925, two specimens.

#### REPTILES

1. Gymnodactylus stoliczkae Steindachner. Stoliczka's Gecko.

A single small gecko was secured by the Simpson-Roosevelt Expedition at Kargil, Kashmir, May 26, 1925.

The fact that the angulation of the digits is entirely wanting in the present specimen, evidently on account of its small size and soft preservation, leads me to suspect that Alsophylax himalayensis Annandale may prove to be identical with Gymnodactylus lawderanus. The digital angle is indicated by the slight enlargement of one of the subdigital lamellae, in this specimen at hand, and this may be distinguished in Annandale's figure; and the species was subsequently recorded from Almora, the type-locality of G. lawderanus.

This specimen is remarkable for the total absence of an external tympanum or ear opening on one side, though it is distinct on the other, about twice the size of the adjacent small scales. The position of the tympanum is indicated by a slight depression, and by the arrangement of the scales on the side on which it is absent.

The apparent prevalence of reduced auditory apparatus in both frogs and lizards at high altitudes appears to be a phenomenon of some interest, though much complicated by the occurrence of the same type of reduction at low levels.

The stomach of the single specimen contained the remains of a small spider.

 Sitana pondicerianus Cuvier. Four-toed Lizard. Allapalli Forest, Jan .1, 1926, one specimen.

- 3. Calotes versicolor (Daudin). Red-throated Lizard. Blood Sucker. Allapalli Forest, Jan. 1, 1926, three specimens.
- 4. Agama tuberculata Gray. Rough Agama.

Near Sanju, Sinkiang, July 1925, two specimens; Panamik, Kashmir, June 11-14, one specimen.

5. Agama himalayana (Steindachner). Himalayan Agama.

Shimsa Kharbu, Kashmir, May 26, 1925, one specimen; near Sanju, Sinkiang, July 1925, one specimen; Panamik, Kashmir, June 11-14, 1925, five specimens.

6. Phrynocephalus theobaldi Blyth. Ladak Sand-agama.

Kargil, Kashmir, altitude 8800 feet, May 26, 1925, one specimen; Bad Kharbu, Kashmir, May 29, 1925, one specimen; route from Srinagar to Leh, Kashmir, May 1925, five specimens.

7. Phrynocephalus axillaris Blanford. Turkestan Sand-agama.

Tam Karaul, Sanju River, Sinkiang, July 1925, three specimens Kivas, Sanju River, Sinkiang, July 4, 1925, one specimen.

8. Eremias multiocellata saturata (Blanford). Many-spotted Sand-lizard.

Sujet Karaul, Kari Kash River, Sinkiang, one specimen; Kilian Kurghan, Kari Kash River, Sinkiang, one specimen; Kivas, Sanju, Sinkiang, July 4, 1925, three specimens.

Geremias multiocellata yarkandensis (Blanford). Yarkand Sand-Lizard.

Kashgar, Sinkiang, Oct. 18, 1925, one specimen. This specimen was obtained from the stomach of *Coluber ravergieri*, listed below.

10. Leiolopisma ladacense (Günther). Ladak Dwarf Skink.

Kargil, Kashmir, May 26, 1925, one specimen; Mulbekh, Kashmir, May 27, 1925, two specimens; route from Srinagar to Leh, Kashmir, May 1925, one specimen.

11. Leiolopisma himalayanum (Günther). Himalayan Dwarf Skink.

Near Sanju, Sinkiang, July 1925, two specimens. Though badly rubbed, these specimens agree in having a lower number of scales around the body and fewer subdigital lamellae than the series of *L. ladacense*.

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# 12. Mabuya allapallensis, sp. nov. Allapalli Skink.

Type from Allapalli Forest, near Chanda, Central Provinces, India. Field Museum of Natural History No. 8648. Immature female. Collected Dec. 26, 1925 by Theodore and Kermit Roosevelt.

Range: Known only from the type locality.

*Diagnosis*: Amply distinguished from all other Indian *Mabuyas* by the union of the fronto-parietals into a single shield.

Description of type: Snout moderately long, obtuse; head depressed; limbs and digits well developed; tail imperfect.

Lower eyelid with a transparent area, divided into seven or eight vertical scales; nostril above the middle of the first labial; supra-nasals narrow, about as long as the rostral-fronto-nasal suture; frontonasal a little broader than long, broadly in contact with the frontal, much larger



Fig. 1. Top of head of Mabuya allapallensis Type, x 3.5

than a prefrontal; frontal obtusely rounded behind, longer than its distance from the end of the snout, shorter than the length of the interparietal and frontoparietal together; four supraoculars, second much the largest; frontal in contact only with the second supraocular which reaches the prefrontal and frontoparietal; five supraciliaries, third longest; frontoparietals united into a single large shield; interparietal nearly as broad as long, about one half as large as a parietal; parietals injured posteriorly, probably in contact behind the interparietal; no enlarged nuchals; no postnasal; first loreal higher than the second, about one half as long; seven upper labials, fifth the largest and beneath the eye; temporals scale-like, not enlarged; ear opening longitudinally oval, bordered by minute granular scales; seventeen smooth lamellae beneath the fourth toe; thirty scales around mid-body, ventrals smooth, dorsals

with five subequal keels; forty-four scales from anal cleft to chin; preanals not enlarged.

Indications of a dark lateral band; general color brownish above, greenish-white below; a white line on the supra-labials extending below the ear to the shoulder.

Measurements: Length of body 34 mm.; snout to ear-opening 8 mm.; arm 10 mm.; leg 13 mm.

Remarks: Though unfortunately based on a single specimen, this species seems to be unmistakably characterized. Thinking that it might have been described as a Lygosoma, I have searched this genus also for a description to fit the specimen at hand. The combination of keeled dorsal scales with united interparietals seems to be unknown in Lygosoma (sensu lat.).

13. Chamaeleo calcaratus Merrem. Common Indian Chameleon.

Allapalli Forest, one specimen.

14. Typhlops acutus (Duméril and Bibron). Sharp-nosed Blind Snake.

Allapalli Forest, one specimen.

15. Sibynophis subpunctatus (Duméril and Bibron).

Allapalli Forest, one specimen, Q, F.M.N.H. No. 8654. Ventrals 215, caudals 45, upper labials 8-9, lower labials 10, preoculars 1, postoculars 2, temporals 2-2-2, total length 294 mm., tail length 48 mm.

16. Natrix piscator (Schneider). Water Snake.

Allapalli Forest, Dec. 26, 1925. Three specimens, F.M.N.H. Nos. 8655-8657. Ventrals 146, 141, 141; caudals 84, 94, 85; preocular single; postoculars 3. Upper labials 9, 4th and 5th entering the eye except on one side in No. 8657, where these two labials are fused. Temporals 2-3, 2-2, and 1-2, 2-2. The ventrals are without black margins, a character which apparently distinguishes the specimens of this species in Peninsular India. In the large adult male (No. 8657), there are well marked supra-anal tubercles.

17. Natrix tessellata Laurenti. Tessellated Water Snake.

Yakkakuduk, Sinkiang, Sept. 23, 1925, one specimen, No. 8704; 'Plains of Sinkiang,' 1925, one specimen, No. 8705. The Yakkakuduk specimen has ventrals 180; the anal entire, caudals 74; of which the second and third are entire; upper labials 8; lower liabals 9-10; preoculars 3; postoculars 5-6; temporals 1-2. The other has  $180\frac{1}{2}$ , anal

divided, caudals 78; upper labials 8; lower labials 10; preoculars 3; postoculars 4-5; temporals 1-2; total length 851 mm., tail 200 mm.

As in the case of other species (Bufo viridis, Natrix piscator), the lack of specimens for comparison and inaccessibility of the literature preclude an examination of the subspecific status of these specimens at the present time.

Stomach contents of No. 8705, remains of a small fish.

### 18. Lycodon aulicus (Linné). Wolf Snake.

Allapalli Forest, three male specimens, Nos. 8649, 8650, 8653. Ventrals 190, 187, 198; caudals 67, 70, 58; upper labials 9; lower labials 10, 11, 10; pre and postoculars 1-2; temporals 2-3, 2-4, 2-3, and 2-3; total lengths 580, 592, 177; tail lengths 109, 108, 28. No. 8650 has the anal undivided.

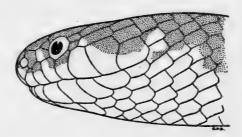


Fig. 2. Lateral view of head of Bungarus caeruleus F.M.N.H. No. 8652, x 3.5.

# 19. Coluber ravergieri Menetries. Turkestan Whip Snake.

Kashgar, Sinkiang, Oct. 18, 1925, one specimen, No. 8700, Q. Dorsal scales 21-15; ventrals 211; caudals 86; upper labials 9; lower labials 10; pre and postoculars 1-2; temporals 2-2-3; total length 365 mm.; tail 77.

Stomach contents, an Eremias multiocellata yarkandensis.

# 20. Bungarus caeruleus (Schneider). Common Krait.

Allapalli Forest, one specimen, No. 8652 Q. Dorsal scales 19 on the neck, dropping promptly to 15; ventrals 210; caudals 47; upper and lower labials 7; preoculars 2; postoculars 2; temporals 1-2; length 283 mm.; tail 37 mm.

I have not found a record of two preoculars in this species nor, indeed, in any other *Bungarus*. The agreement in other characters with *caeruleus* is so complete that it is highly improbable that this character has any taxonomic significance in this case.

# 21. Agkistrodon halys intermedius (Strauch). Mongolian Pit Viper.

Simtash, Valley of the Tekkes River, Sinkiang, Sept. 1, 1925, one specimen, No. 8701, 9; Thian Shan (probably near the Tekkes), Sinkiang, 1925, two specimens, Nos. 8702-8703, & &. The dorsal scales are 27-23-17, 25-23-17, and 25-23-17; ventrals 160, 159, and 164; caudals 48, 42, 42; in No. 8703 the third to sixth caudals are entire; upper labials 7-8, 7-7, and 8-8; lower labials 10-11 in each; oculars uniformly 2-2; temporals uniformly 2-4; length 416, 550, and 534 mm.; tail 60, 73, and 74 mm.

These specimens have been compared with Mongolian examples with which they agree closely in most characters. There is an apparent difference in the numbers of ventrals and caudals, the Sinkiang specimens approaching the lower numbers of typical halys, as is to be expected if the two forms intergrade.

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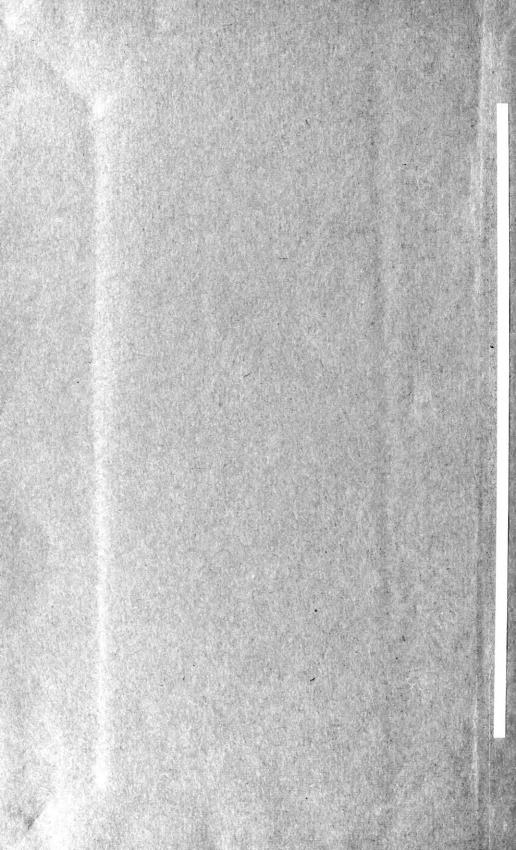
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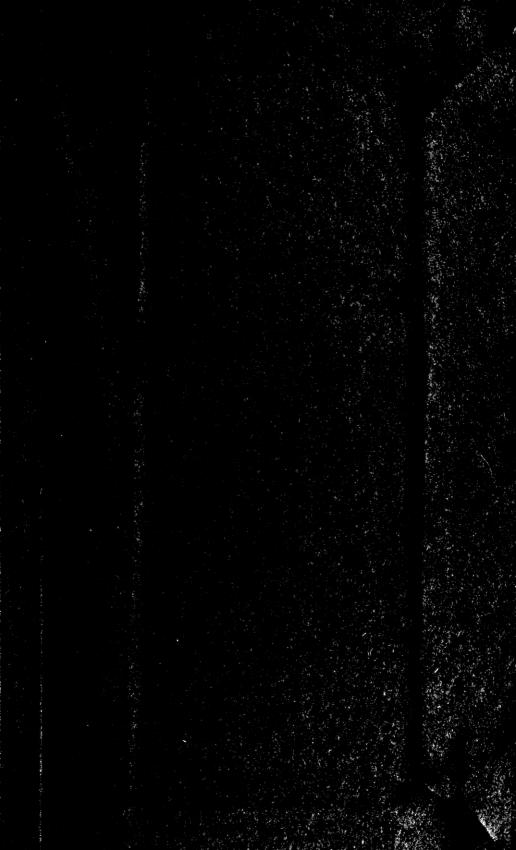
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